

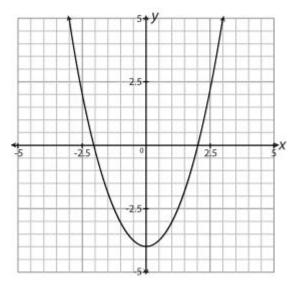
Master ID:	2557943 Revision:	1
Correct:	В	
Rationale:		
A	and the factor and and a second burger	

- A. The function in this graph does not have zeros at x = -4 and x = +5. The function may have been factored incorrectly or the correct factoring was misinterpreted to have zeros at x = 4 and x = -5.
- B. This function factors as (x + 4)(x 5), and therefore has zeros, or *x*-intercepts, at x = -4 and x = +5.
- C. The function in this graph does not have zeros at x = -4 and x = +5. This may be the result of incorrectly factoring the equation as (x - 4)(x - 5).
- D. The function in this graph does not have zeros at x = -4 and x = +5. This may be the result of incorrectly factoring the equation as (x - 4)(x + 4).

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Standards:
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CCSS.Math.Content.HSA-APR.B.3

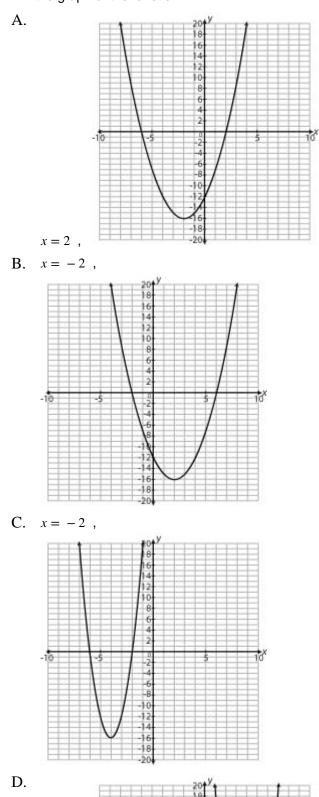
2 The graph of the equation $y = x^2 - 4$ is shown on the coordinate plane below.



What are the factors of this polynomial? Explain how you know.

Master	ID: 2191316 Revision: 4
Rubric:	
2	The response is correct and complete. A sample 2- point response is shown below.
	Sample Correct Answer:
1	The graph shows that the polynomial intercepts the <i>x</i> -axis at -2 and 2. This means that $y = 0$ for all values of <i>x</i> equal to -2 and 2. So $y = 0$ when $(x + 2)$ and $(x - 2)$ equal 0. This means that these are the factors of this polynomial. The response is partially correct.
0	This level may include one correct factor with a complete explanation given, OR the correct zeros listed, but they are not given in factor form and a complete explanation given, OR two correct factors but an incorrect or missing explanation. The response is completely incorrect, there is no
0	response, or the response is off topic.
Standar	
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3 Given the function $f(x) = x^2 - 4x - 12$, which of these correctly identify a zero and a sketch of the graph of the function?



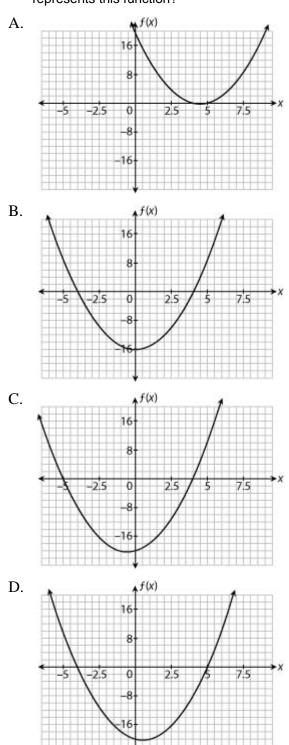
Continue: Turn to the next page.

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Page 2

Master	ID: 2539168 Revision:
Correct	: B
Rationa	le:
A.	The function in this graph does not have zeros at $x = -2$ and $x = 6$. This function may have been factored incorrectly or the correct factoring was misinterpreted to have zeros at $x = 2$ and $x = -6$.
B.	This function factors as $(x + 2)(x - 6)$ and therefore has zeros, or <i>x</i> -intercepts, at $x = -2$ and $x = 6$.
C.	The function in this graph does not have zeros at $x = -2$ and $x = 6$. This may be the result of incorrectly factoring the equation as (x + 2)(x + 6).
D.	The function in this graph does not have zeros at $x = -2$ and $x = 6$. This may be the result of incorrectly factoring the equation as (x - 2)(x - 6).
Standar	
C	CSS.Math.Content.HSA-APR.B.3

4 The zeros of the function $f(x) = x^2 - x - 20$ can be used to sketch its graph. Which graph below represents this function?



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